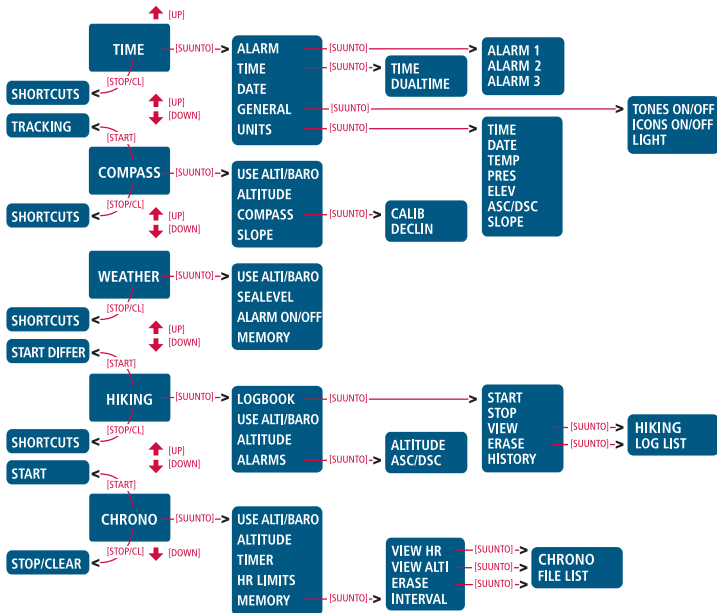


X6_{HR}

INSTRUCTION MANUAL



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1. GENERAL INFORMATION

Suunto X6_{HR} Wristop Computer is a reliable high precision electronic instrument intended for recreational use. Outdoor enthusiasts and endurance athletes who enjoy such sports as mountain climbing, running and biking can rely on Suunto X6_{HR}'s accuracy.

NOTE: *Suunto X6_{HR} should not be substituted for obtaining measurements that require professional or industrial precision and should not be used to obtain measurements when skydiving, hang gliding, paragliding, gyrocopter riding and flying small aircraft.*

Suunto X6_{HR} features five main functions: TIME, ALTIMETER, BAROMETER, COMPASS and HEART RATE MONITOR. Each function provides several sub modes further enhancing the usefulness to its owner. All key features and modes are discussed in detail in chapter 3.

1.1. CARE AND MAINTENANCE

1.1.1. Care of Suunto X6_{HR}

Perform only the procedures described in this manual. Never attempt to disassemble or service your Suunto X6_{HR}. Protect your Suunto X6_{HR} from shocks, extreme heat and prolonged exposure to direct sunlight. If not in use, your Suunto X6_{HR} should be stored in a clean, dry environment at room temperature.

Suunto X6_{HR} can be wiped clean with a lightly moistened (warm water) cloth. If there are stubborn stains or marks, you can apply mild soap to the area. Do not expose Suunto X6_{HR} to strong chemicals such as gasoline, cleaning solvents, acetone, alcohol, insect repellents, adhesives and paint, as they may damage the unit's seals, case and finish. Keep the PC interface contacts clean with e.g. a toothbrush.

Make sure the area around the sensor is free of dirt and sand. Never insert any objects into the sensor opening.

1.1.2. Care of Transmitter Belt

Wash the transmitter with mild soap and water after each use. Rinse with pure water; dry thoroughly and carefully.

Store in a cool dry place. Never store the transmitter wet. Moisture keeps the electrodes wet and transmitter activated, thereby shortening the life of the battery.

Do not bend or stretch the transmitter as this may damage the electrodes.

1.2. WATER RESISTANCE

Suunto X6_{HR} is water resistant up to 100 m/330 ft. However, it is *not* a diving instrument and therefore it should not be used to obtain data under water.

The transmitter belt is water resistant to 20m/66ft. It is suitable for swimming but should not be used in diving. Refer to chapter 2.4.3. for information about using X6_{HR} and the transmitter belt in water.

1.3. BATTERY REPLACEMENT OF THE SUUNTO X6HR

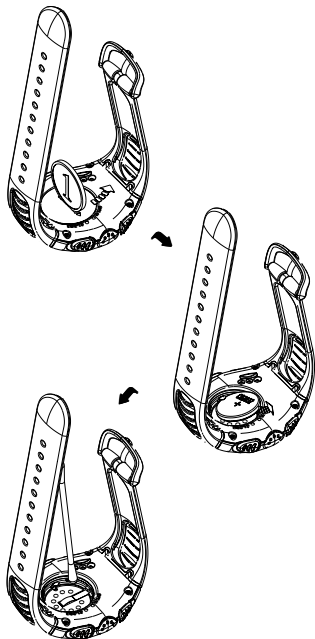
Suunto X6HR operates on a 3-Volt lithium cell, type: CR 2032. The life expectancy is approximately 12 months in Time/Weather modes.

A low-battery warning indicator is activated on the display when approximately 5–15 percent of the battery capacity is still available. When this occurs we recommend replacing the battery. However, extremely cold weather may activate the low battery warning indicator, even though the battery is still fully operational. If the battery warning indicator activates in temperatures above 10°C (50°F), replace the battery.

NOTE: Heavy use of the backlight, altimeter, compass and heart rate monitor will significantly reduce battery life.

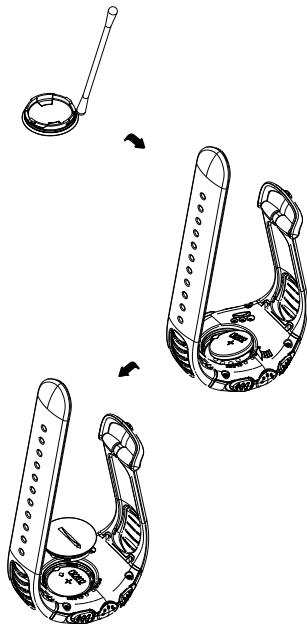
To replace the battery

1. Insert a coin into the slot located on the battery compartment cover on the backside of Suunto X6HR.
2. Turn the coin *counterclockwise* until it is aligned with the open position marker, or even slightly further for easy opening.



3. Remove the battery compartment cover. Ensure that the *O* ring and all surfaces are clean and dry. Do not stretch the *O* ring.
4. Remove the old battery carefully.
5. Place the new battery into the battery compartment with the positive side facing up.
6. With the *O* ring in the correct position, replace the battery compartment cover and turn it *clockwise* with a coin until it is aligned with the closed position marker.

NOTE: *Battery replacement should be performed with extreme care to ensure that the Suunto X6_{HR} remains water-resistant. Careless battery replacement may void warranty.*



1.4. BATTERY REPLACEMENT OF THE TRANSMITTER BELT

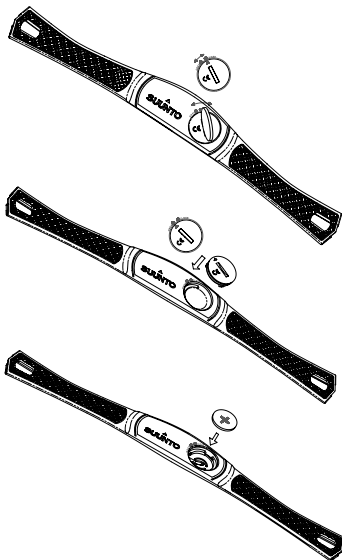
The transmitter belt operates on a 3-Volt lithium cell, type: CR 2032.

The transmitter belt's average expected battery life is 300 hours of use in ideal operating temperatures.

When Suunto X6_{HR} is not receiving a signal but the transmitter belt is active, a change of battery might be necessary. Refer to chapter 2.4. for other factors that may interfere with the correct signal.

To change the battery

1. Insert a coin into the slot located on the battery compartment cover on the backside of the transmitter belt.
2. Turn the coin *counterclockwise* until it is aligned with the open position marker, or even slightly further for easy opening.
3. Remove the battery compartment cover. Ensure that the O ring and all surfaces are clean and dry. Do not stretch the O ring.
4. Carefully remove the old battery.
5. Place the new battery into the battery compartment with the positive side facing up.



6. With the O ring in the correct position, replace the battery compartment cover and turn it *clockwise* with a coin until it is aligned with the closed position marker.

NOTE: *Suunto recommends that the battery cover and the O ring are changed simultaneously with the battery to ensure that the transmitter remains clean and waterresistant. Replacement covers are available with replacement batteries.*

NOTE: *Battery covers of the transmitter belt and the wristop computer are not interchangeable.*

2. HOW TO USE YOUR SUUNTO X6HR

2.1. DISPLAY

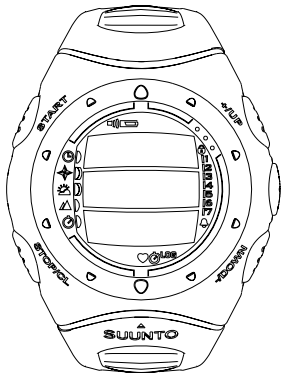
When your Suunto X6HR leaves the factory, it is in sleep mode, with the display empty. Long press (> 2 s) any button to activate the Suunto X6HR. The text “DEFRAG OF MEMORY” is displayed and after a few seconds the Time mode is activated. Later on, you can select which mode is displayed. For information about setting the correct time, refer to chapter 3.2.3.

In addition to mode-specific information, the Suunto X6HR display includes several symbols.

2.1.1. Mode Symbols

The mode symbols on the left of the display indicate the active mode:

	Time
	Compass
	Weather
	Hiking
	Chrono



2.1.2. Function Symbols

Function symbols indicate that either a function (such as Alarm) has been activated or something needs to be done (battery symbol). The function symbols are:

 Alarm


Active, when at least one of the alarms is on.

 Weather/Altitude/HR alarm


Active, when weather alarm, altitude alarm, asc/dsc alarm or HR limits alarm is on.

 Logbook

Active, when the hiking logbook is recording data.

 Chrono

Active, when the chrono is on and recording data to a file.

 Use alti/baro

Indicates, whether the air pressure sensor is used to measure altitude or used as a barometer.

If you select the air pressure to be displayed as altitude, the symbol is next to the Compass mode symbol. If you select the air pressure to be displayed as weather information, the symbol is next to the Weather mode symbol. For more information, refer to page 29.

 Battery

Active, when 5–15 percent of the battery capacity is left and the battery should be replaced.

 Button Lock

Active, when the button lock is activated.

♥ Heart Rate

Active, when the heart rate monitor is receiving heart rate signal. Flashes in sync with the heart rate.

2.2. BUTTONS

2.2.1. Short and Long Press

The buttons have different functions depending on how long they are pressed.

The ordinary *press* or *short press* means that the button is pressed quickly.

The *long press* means that the button is pressed for more than 2 seconds.

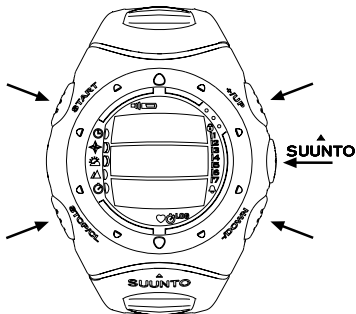
2.2.2. Start Button

Short press

- In Chrono mode, starts timing and saves and displays the intermediate times.
- In Hiking mode, saves the mark points (altitude, heart rate and time).

Long press

- Activates the backlight when the backlight is not set to off. For more information on backlight settings, see page 27.



2.2.3. Stop/CL Button

Short press

- Returns to the previous menu level or to the previous selection *without accepting* the selection.
- In the Chrono mode, stops timing.
- In other mode main displays, acts as a shortcut button that toggles the lowest field of the main display between three different alternatives. The selection stays active even if the mode or menu level is changed.

Long press

- Returns to the main display of the current mode *without accepting* the last selection.
- In Chrono mode, resets the stopwatch.

2.2.4. Suunto Button

Short press

- Scrolls to a lower menu level.
- Accepts the selections made with arrows and moves to the next phase.
- After the last selection, returns to the settings menu.
- With two possible selections (e.g. light on/off), activates the selection and accepts the selections made with arrows.

Long press

- Returns to the main display of the current mode and accepts the selection.
- With two possible selections (e.g. light on/off), accepts the selection and returns directly to the main display of the current mode.
- In the main display of all modes, activates or deactivates the heart rate limits alarm.

2.2.5. Arrow Buttons

Short press

- Changes modes in the mode main display.
- Scrolls the menus up and down, and logbook and memory forward and back.
- Changes the values. The *up* arrow increases the value and the *down* arrow decreases the value.
- With two possible selections (e.g. light on/off), both arrows change the value.

2.2.6. Button Lock

The button lock prevents buttons being pushed accidentally. If the button lock is activated and you try to press a button, the message “UNLOCK PRESS SUUNTO” is displayed.

Activating the lock

To activate the lock

1. Press the *Suunto* button. Suunto X6HR moves to the function menu.
2. Press the *Start* button within 2 seconds. The buttons are locked and Suunto X6HR moves to the main display of the current mode.

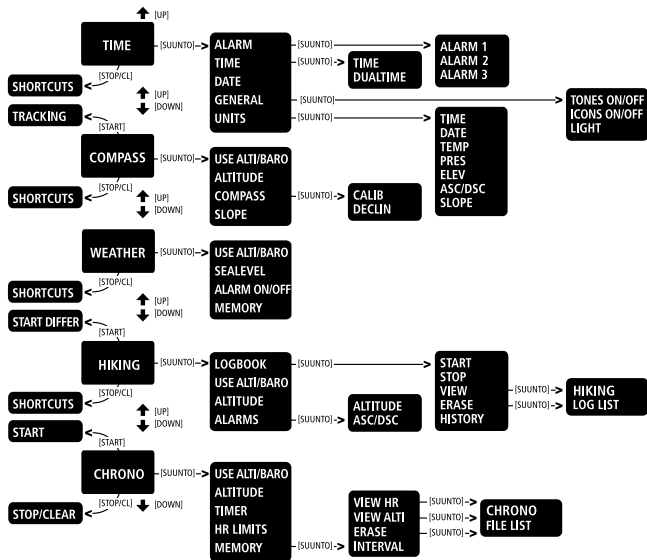
Unlocking the lock

To unlock the button lock

1. Press the *Suunto* button. The following text is displayed: “NOW PRESS START”.
2. Press the *Start* button within 2 seconds.

2.3. MENUS

2.3.1. Basic Menu Structure



The menus are organized hierarchically under the modes. When you select a mode, its main display appears. When you press Suunto in the mode's main display, the mode's *function menu* is displayed. The function menu includes several functions and all the functions include sub-functions or settings. This constructs a hierarchical menu structure.

2.3.2. Navigating in Menus

The menu items can be scrolled with the *up* and *down* arrow buttons on the right side of Suunto X6HR. Three menu items can be displayed at the same time. The menu item that is currently active and can thus be selected is displayed in **reversed color**. On the right side of the display there is an indicator bar showing the total number of menu items. The number of the active menu item is displayed next to the indicator bar.

You can move deeper into the hierarchy by selecting a menu item and pressing the *Suunto* button. If you want to return one step up in the hierarchy, press the *Stop/CL* button. Remember that pressing only the *Stop/CL* button does not save the changes—first they have to be accepted using the *Suunto* button.

If you want to return directly to the main display of the active mode, press either the *Suunto* button (saves the changes) or the *Stop/CL* button (discards the last change) for more than 2 seconds.

Suunto X6HR has been designed to guide you as much as possible when you navigate in the menus. When you perform a function, Suunto X6HR often automatically returns to the menu that you are likely to use next. Also, for example, if you try to do something that is impossible, Suunto X6HR first displays a message and then automatically recommends a function in reversed color to help you use the functions.

2.4. HEART RATE MONITOR AND TRANSMITTER BELT

The heart rate monitor is the premier feature of the Suunto X6_{HR}. It provides the user with a versatile instrument for measuring and analyzing physical performance in different conditions. When used in conjunction with the altimeter function, the heart rate monitor allows the user to observe changes in heart rate during ascents and descents and the impact of altitude on heart rate. The heart rates can be recorded in Suunto X6_{HR} memory and transferred to a PC for analysis. The heart rate data is available in Hiking and Chrono modes.

2.4.1. Electromagnetic interference

Disturbances may occur near high voltage power lines, traffic lights, overhead lines of electric railways, electric bus lines or trams, televisions, car motors, bike computers, some motor driven exercise equipment, cellular phones or when you walk through electric security gates.

It is best to position the Wristop computer within 3 feet or 0,9 meters of the transmitter. Ensure no other transmitters are within that range; signals from other transmitter(s) can cause an incorrect readout.

Repeated kinetic shock to the Suunto X6_{HR} may cause an incorrect heart rate readout and should be avoided.

2.4.2. Warnings

Persons who have a pacemaker, defibrillator, or other implanted electronic device use the heart rate monitor at their own risk. Before starting the initial use of the heart rate monitor, we recommend an exercise test under a doctor's supervision. This will ensure the safety and reliability of the pacemaker and heart rate monitor when being used simultaneously.

Exercise may include some risk, especially for those who have been sedentary. We strongly advise consulting your doctor prior to beginning a regular exercise program.

2.4.3. Use of Suunto X6_{HR} and Transmitter Belt in a water environment

Suunto X6_{HR} is water-resistant to a depth of 100m/330ft. The transmitter belt is water-resistant to 20m/66ft. To maintain water resistance and to ensure that the guarantee remains valid, it is strongly recommended to have all service, except for battery change, to be done by authorized Suunto service personnel.

Heart rate measurement in a water environment is technically demanding for the following reasons:

- Pool water with a high chlorine content and seawater may be very conductive and the electrodes of the transmitter may get temporarily short circuited and ECG (=electrocardiogram) signals cannot be detected by the transmitter unit.
- Jumping into the water or strenuous muscle movement during competitive swimming may cause water resistance that shifts the transmitter on the body to a location where it is not possible to pick up the ECG signal.
- The ECG signal strength varies depending on the individual's tissue composition and the percentage of people who have problems with heart rate measurement is considerably higher in a water environment than in other use.

2.4.4. Activating the Heart rate monitor

To activate the heart rate monitor

1. Attach the transmitter to the elastic strap.
2. Adjust the strap length to fit snugly and comfortably. Secure the strap around your chest, below the chest muscles. Lock the buckle.

3. Raise the transmitter a little off your chest and **wet the grooved electrode areas on the back** of it. It is important that these electrodes are wet during the exercise.
4. Check that the wet electrode areas are firmly against your skin and the logo is in a central upright position.
5. Wear the Suunto X6^{HR} as you would wear an ordinary watch.
6. Go to Chrono mode and wait until the heart rate reading appears on the bottom row. Alternatively, go to Hiking mode, select the heart rate/time short cut on the bottom row and wait for the heart rate reading to appear.
7. To start recording the heart rate in Chrono mode, press start when the HR reading is shown.

NOTE: *It is recommended that you wear the transmitter against your bare skin to ensure flawless operation. However, if you wish to wear the transmitter over a shirt, moisten the shirt well under the electrodes.*

3. MODES

3.1. GENERAL INFORMATION

Suunto X6HR has five modes: Time, Compass, Weather, Hiking and Chrono. Heart rate is displayed in Hiking and Chrono modes. The symbols for each mode are displayed on the left of the Suunto X6HR display. When you select a mode, the active mode indicator appears on the display next to the symbol of the selected mode. If the icons are set to *on*, they also display the active mode.

To select a mode, press either the *up* or *down* arrow while in the main display of any mode and scroll the modes. During scrolling, the icon of the selected mode and its name appear on the display. When you stop scrolling, the icon stays for a little while and then the main display of that mode opens automatically.

NOTE: *In addition to the active mode indicator, the Use indicator can also be displayed next to the Compass or Weather mode symbols. If the Use is set to Alti, the indicator is next to the Compass mode symbol and if the Use is set to Baro, the indicator is next to the Weather mode symbol. For more information about the Alti or Baro Use, see page 32.*

3.2. TIME MODE

3.2.1. Main Display

When you select the Time mode, the main display opens. The main display has three rows:

Date

The first row displays the date in the selected format. For more information about changing the date format, see page 28.

Time

The second row displays the time in the selected format. For more information about changing between 12- and 24-hour display, see page 28.


Shortcuts

The third row displays alternatively the weekday, seconds or dual time. To change the displayed information, press the *Stop/CL* button.

- **Weekday.** Displays the current weekday.
- **Seconds.** Displays seconds.
- **Dual time.** Displays the dual time.

3.2.2. Alarm

You can set three independent alarms. In addition to the time, you can define the date when the alarm sounds. If you do not define the date, the alarm will sound daily, as long as it is set to *on*.

When the alarm is set, the alarm symbol  appears in the Suunto X6HR display.

Activating alarms

To activate an alarm

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, *Alarm* is already reversed in color as the first menu item. Select it by pressing *Suunto*. The alarm menu displays the status of the alarms. When you open the menu for the first time, the alarm indicators are set to *off* as a default.
3. Scroll to the alarm you want to set and press *Suunto*. The alarm information is displayed and the on/off indicator is displayed as active (in reversed color). When

- you open the alarm information for the first time, the time is 00:00 or 12:00 am.
4. Press either the *up* or *down* arrow to change the alarm status to *on*.
 5. Press *Suunto*. The alarm symbol appears on the display and the hour selection is activated.
 6. Set the correct *hour* with the arrow buttons and press *Suunto*. The minute selection is activated.
 7. Set the correct *minutes* with the arrow buttons and press *Suunto*.
 8. If you want the alarm to sound *every day*, accept the *dd.mm* format by pressing *Suunto*. (A long press returns back to the main display, two short presses first activate the *mm* field and then return to the function menu.) The alarm is set to sound every day and you return to the function menu.
 9. If you want to set the alarm for a specific date, set the day and month in the *dd* and *mm* fields with the arrow buttons and accept the date by pressing *Suunto*. The alarm is set to sound only once on the selected date and you return to the function menu. To set the alarm back to daily function, activate the *mm* field and set its value back to *mm* with the arrow buttons. Accept the setting with *Suunto*.

Deactivating alarms

To deactivate an alarm

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Alarm* and press *Suunto*.
3. Scroll to the alarm you want to set off and press *Suunto*. The alarm information is displayed and the on/off indicator is displayed as active (in reversed color).
4. Press either the *up* or *down* button to change the alarm status to *off* and press *Suunto*. The alarm symbol disappears from the display.

Acknowledging alarms

When you hear the alarm, you can acknowledge it by pressing any of the Suunto X6HR buttons. The alarm stops automatically after 30 seconds.

3.2.3. Time

The time means the current time that is visible on the second row of the Time mode main display.

Dual time makes it possible to keep track of another time, for example, another time zone when you are traveling. The dual time is displayed on the third row of the Time mode main display as a shortcut. To scroll to the dual time shortcut, press the *Stop/CL* button in the main display.

Setting time and dual time

To set the time and dual time

1. To access the function menu, press *Suunto* in the main display.
2. Scroll to *Time* on the function menu and press *Suunto*. The menu with the options time and dual time is displayed.
3. Scroll to either time or dual time and press *Suunto*. The hour selection is activated.
4. Change the *hour* with the arrow buttons and press *Suunto*. The minute selection is activated.
5. Change the *minutes* with the arrow buttons and press *Suunto*. The second selection is activated.
6. When you press the arrow down button, the seconds are zeroed. If you want to set specific seconds, press the arrow up button and the seconds start running.
7. When the seconds setting is correct, press *Suunto*. You automatically return to the function menu.

NOTE: If the time is displayed as a 12-hour clock, the symbol AM or PM is displayed on the last row. For more information about the 12/24-hour clock, see page 28.

NOTE: When you set the seconds for time, they are automatically updated to dual time as well.

NOTE: When you are setting dual time, you can set only hours and minutes, the seconds are retrieved from the Time option.

3.2.4. Date

The date has three different formats: dd.mm, mm.dd or day. For more information about changing the format, see page 28.

Changing the date

To change the date

1. To access the function menu, press *Suunto* in the main display.
2. Scroll to *Date* on the function menu and press *Suunto*. The day field is activated.
3. Change the value of the day field with the arrow buttons and press *Suunto*. The month field is activated.
4. Change the value of the month field with the arrow buttons and press *Suunto*. The year field is activated.
5. Change the year with the arrow buttons and press *Suunto*. (All the years mean the 21st century.) You automatically return to the function menu.

NOTE: The weekday is updated automatically to the third row according to the set date.

3.2.5. General

The General function includes the general settings for using your Suunto X6^{HR}.

Setting tones on or off

Tones are the sounds that indicate that you have successfully pressed the buttons. The tones can be set to on or off.

To set the tones on or off

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *General* and press *Suunto*. The General menu is displayed.
3. Scroll to *Tones* and press *Suunto*. The on/off field is displayed as active in reversed color.
4. Change the value of the field to either *on* or *off* with the arrow buttons and press *Suunto*. The tones are now set.

Setting icons on or off

Icons are the symbols that appear for a moment when you change the mode. You can either show or hide the symbols.

To set the icons on or off

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *General* and press *Suunto*. The General menu is displayed.
3. Scroll to *Icons* and press *Suunto*. The on/off field is displayed as active.
4. Change the value of the field to either on or off with the arrow buttons and press *Suunto*. The icons are now set.

Setting backlight

Light means the backlight of the Suunto X6HR display. Light has three possible settings:

- **Normal.** The light goes on when you press the *Start* button for more than 2 seconds in any other mode than the Chrono mode. The light is on for 5 seconds after the last press of any button.

NOTE: *If the backlight setting is normal and you press the Start button in Chrono mode, the Chrono is activated. If you want to use the light in the Chrono mode, you have to set the backlight to Night Use.*

- **Off.** The light does not go on from any button or during an alarm.
- **Night Use.** The light goes on when you press any of the buttons and stays on for 5 seconds after the last press of any button.

NOTE: *The backlight goes on when an alarm sounds in Normal and Night Use.*

NOTE: *When the backlight is on, heart rate reception is interrupted.*

To change the light setting

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *General* and press *Suunto*. The General menu is displayed.
3. Scroll to *Light* and press *Suunto*. The current light setting is displayed as active.
4. Select the light setting with the arrow buttons and press *Suunto*. The light setting is set and you return to the function menu.

3.2.6. Units

The units menu includes the units that are used with all the Suunto X6HR functions and settings. The unit settings affect the way information is displayed in all the Suunto X6HR modes.

Setting the time format

The time setting defines whether the 12- or 24-hour display is used.

To change the 12/24-hour display

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Units* and press *Suunto*. The Units menu is displayed.
3. Scroll to *Time* and press *Suunto*. The 12/24 h field is activated.
4. Select the correct setting with the arrow buttons and press *Suunto*. The time display is set.

Setting the date format

The Date setting defines the format in which the date is displayed. The possible formats are:

- **DD.MM.** Day before the month, e.g. 27.11.
- **MM.DD.** Month before the day, e.g. 11.27.
- **Day.** Only the day is displayed, e.g. 27.

To change the date format

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Units* and press *Suunto*. The Units menu is displayed.
3. Scroll to *Date* and press *Suunto*.
4. Select the correct date format with the arrow buttons and press *Suunto*.
The format is set and you return to the function menu.

Setting the unit of temperature

The Temp setting defines the unit in which the temperature is displayed. The options are Celsius (°C) and Fahrenheit (°F).

To change the unit of temperature

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Units* and press *Suunto*. The Units menu is displayed.
3. Scroll to *Temp* and press *Suunto*. The temperature unit field is activated.
4. Select the unit with the arrow buttons and press *Suunto*. The temperature unit is set.

Setting the unit of air pressure

The Pres setting defines the unit in which the air pressure is displayed. The options are *hPa* and *inHg*.

To change the unit of air pressure

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Units* and press *Suunto*. The Units menu is displayed.
3. Scroll to *Pres* and press *Suunto*. The air pressure unit field is activated.
4. Select the correct unit with the arrow buttons and press *Suunto*. The unit of the air pressure is set.

Setting the unit of elevation

The Elev setting defines the unit in which the elevation is displayed. The options are meters (m) and feet (ft).

To change the unit of elevation

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Units* and press *Suunto*. The Units menu is displayed.
3. Scroll to *Elev* and press *Suunto*. The elevation unit field is activated.
4. Select the correct unit with the arrow buttons and press *Suunto*. The unit of the elevation is set.

Setting the unit of ascent/descent rate

The *Asc/Dsc* setting defines the way the ascent or descent rate is displayed. The possible formats are:

- m/s
- m/min
- ft/s
- ft/min

To change the *Asc/Dsc* format

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Units* and press *Suunto*. The Units menu is displayed.
3. Scroll to *Asc/Dsc* and press *Suunto*.
4. Select the correct format with the arrow buttons and press *Suunto*. The format is set and you return to the Units menu.

Setting the unit of slope

The Slope setting defines the unit in which the slope is displayed. The options are degree (°) and percentage (%).

To change the unit of slope

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Units* and press *Suunto*. The Units menu is displayed.
3. Scroll to *Slope* and press *Suunto*. The slope unit field is activated.
4. Select the correct unit with the arrow buttons and press *Suunto*. The slope unit is set.

3.3. COMPASS MODE

NOTE: Heart rate reception is interrupted when you are using the compass mode.

3.3.1. Main Display

When you select the Compass mode, the main display opens. The main display has three rows.

Bearing

First row displays the bearing pointed with the sighting marks of Suunto X6HR. The bearing is displayed in bold when the compass is level. Level position is needed to ensure accurate bearings.

Compass

The second row displays the heading of Suunto X6HR as a graphical presentation of a compass rose. The rose displays the cardinal and half-cardinal points.

The magnetic sensor of the compass functions for 40 seconds at a time. After this period the compass moves into power-saving mode and the message "START COMPASS" is displayed. To activate the compass again, press the *Start* button.

Shortcuts

The third row of the main display contains shortcuts to three functions. To change the function, press the *Stop/CL* button.

- **Altitude.** In *Alti* use, displays the current altitude, and in *Baro* use, displays the reference altitude. For more information about the Alti and Baro uses, see section 3.3.2.
- **Bearing tracking.** Bearing tracking helps you to follow a certain bearing in terrain. When you scroll to bearing tracking for the first time, it is 0°. To activate the search

for bearing move your Suunto X6HR horizontally until chosen bearing is displayed on the first row and press the *Start* button. The selected bearing is displayed on the third row until you select a new bearing with the *Start* button again. When you have selected the bearing tracking, the compass rose in the middle row displays a dotted vertical line indicating the bearing tracking set.

NOTE: *The tracking remembers the last direction selected the next time you scroll to it.*

- **Time.** Displays the current time.

NOTE: *The shortcuts also function normally in the power-saving mode. When you select the bearing tracking shortcut, the compass is automatically activated.*

3.3.2. Use

With the Use function you can define whether the air pressure measurement is used to measure the altitude or to represent the weather conditions.

If you select the *Alti* option (altimeter), the measured air pressure is displayed as altitude and all changes in atmospheric pressure are interpreted as changes in altitude.

When the *Alti* use is selected, the altitude reading of Compass, Hiking and Chrono modes changes, but the atmospheric pressure (sea level) in the second row of the Weather mode remains constant. The absolute pressure changes if it is selected as a shortcut in the third row of Weather mode.

If you select the *Baro* option (barometer), the measured air pressure is displayed as weather information and all changes in atmospheric pressure are interpreted as being due to a change in the weather.

When *Baro* use is selected, the altitude reading in the Compass, Hiking and Chrono

modes remains constant. The atmospheric pressure (sea level and absolute) in the Weather mode changes.

Select the correct use according to what you want to measure. For example, on a hiking trip, you can select the *Alti* use for the day to see how high you have climbed. When you camp for the night, you can change the use to *Baro* to make sure that the weather changes do not catch you by surprise.

To select either Altimeter use or Barometer use, follow these steps:

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Use* with the arrow buttons and press *Suunto*. The alti/baro field is activated.
3. Change the content of the field with the arrow buttons and press *Suunto*. You then return to the function menu.

3.3.3. Altitude/Sealevel

In order for the altimeter to function correctly you need to set the reference altitude. This means that you set an altitude reading that is equal to the real altitude. Set the reference altitude in a place where you know the altitude, for example, with the help of a topographical map. Suunto X6HR has a factory set reference altitude which corresponds to the standard barometric pressure (1013 hPa/29.90inHg at sea level). If you know neither your current altitude nor the correct sea level pressure, you can have an estimate of your altitude by setting the sea level pressure to 1013hPa/29.90inHg.

In Weather mode, Altitude is replaced with *Sealevel*. This function is set in the same way as Altitude.

To set the reference altitude, follow these steps:

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Altitude* with the arrow buttons and press *Suunto*.
3. With the arrow buttons, set the reference altitude in the field to match the altitude of your current location and press *Suunto*. You return to the function menu.

If you do not know the altitude of the place you are in, you can use the air pressure to help determine the altitude. To do this, move into Weather mode and set the current sea level air pressure. You can find out the sea level air pressure, for example, from the airport, weather station or Internet weather pages.

3.3.4. Compass

The compass menu includes functions for either calibrating the compass or setting its declination.

Calibrating the compass

As a basic rule, you should calibrate the compass if it does not seem to work well, for example, when it displays the wrong compass bearing or the bearing changes too slowly. You should also calibrate the compass after replacing the Suunto X6HR battery.

Strong electromagnetic fields, such as electric lines, loudspeakers and magnets, can affect the compass calibration. Therefore it is advisable to calibrate the compass if your Suunto X6HR has been exposed to these fields.

It is also recommended to calibrate the compass before a long trip, such as a hiking trip.

NOTE: *Calibrate the compass before using it for the first time, and before you leave for an extended outdoor activity.*

NOTE: *Remember to hold Suunto X6HR level during the calibration.*

Calibration includes the following phases:

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Compass* with the arrow buttons and press *Suunto*.
3. In the compass menu, move to *Calib* with the arrow buttons and press *Suunto*.
4. The screen displays the text “ROTATE 360°” and begins a countdown from 5 to 0. When the countdown reaches 0, calibration starts. Hold Suunto X6HR level and slowly rotate the device in a full clockwise or counterclockwise circle.
 - The level symbol indicates that calibration is in progress. When the cross is in the middle of the symbol, the Suunto X6HR is held level. The animation represents the progress of the calibration.
 - If the calibration succeeds, the “COMPLETE” message is displayed and Suunto X6HR returns to the function menu.
 - If the calibration fails, the “TRY AGAIN” message is displayed and the process returns to the countdown for a further attempt. It is normal to have a successful calibration on second attempt.
 - If the calibration fails five times, the “FAILED, REFER MANUAL” message is displayed and Suunto X6HR returns to the compass menu.

If the calibration fails five times in a row, it is possible that you are in an area that has sources of magnetism, such as large metal objects, power lines, loudspeakers and electric motors. Move to another location and try to calibrate the compass again.

You can also remove the battery and then insert it again. Also make sure the compass remains level during calibration—otherwise the calibration may fail.

If the calibration continues to fail, contact the authorized Suunto service.

NOTE: *The level symbol is not shown if the compass is calibrated when the heart rate monitor is active.*

Setting the compass declination

You can compensate for the difference between true north and magnetic north by adjusting the compass declination. The declination can be found, for example, in the topographic maps of your local area.

To set the compass declination

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Compass* with the arrow buttons and press *Suunto*.
3. In the compass menu, move to *Declin* with the arrow buttons and press *Suunto*.
The first row of the next window is activated.
4. Select the correct option (off/east/west) with the arrow buttons and press *Suunto*.
The degrees field is activated.
5. Set the degrees with the arrow buttons. The initial value is either 0.0° or the value accepted when last setting the declination.
6. Press *Suunto*. You return to the compass menu.

3.3.5. Slope

The slope function measures the degree of slope.

To measure the slope

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Slope* with the arrow buttons and press *Suunto*.
When you incline Suunto X6HR, it displays the angle indicating the degree of slope on the screen. The sighting marks on the ring help to point to the chosen direction.
3. When the angle is selected, lock it by pressing *Start*. The angle remains on the display.
4. To unlock the angle and start measuring the slope again, press *Start*.
5. To move back to the function menu, press *Suunto*.

NOTE: The measured value is not saved to the Suunto X6_{HR} memory.

NOTE: The slope function does not work when the heart rate is being measured. Instead of the angle, “- -” is displayed.

NOTE: The measuring range is up to 60° or 173 %. After this, “—” is displayed.

3.4. WEATHER MODE

3.4.1. Main Display

When you select the Weather mode, the main display opens. The main display has three rows.

Temperature

The first row displays the temperature in the selected unit. For more information about defining the unit of temperature, refer to page 28.

NOTE: Because the sensor is close to your wrist, you have to keep Suunto X6_{HR} away from the body's temperature at least for 15 minutes before the temperature measurement is accurate. When you measure the temperature of the water, less time away from the body is required.

Air pressure

The second row displays the air pressure at sea level. For more information about defining the unit of air pressure, refer to page 29.

Shortcuts

The third row of the main display contains shortcuts to three functions. To change the function, press the *Stop/CL* button.

- **Trend.** A graphical presentation of the development of air pressure (sea level) during the last 6 hours in 15-minute intervals. One step on the vertical axis represents one hPa and one step on the horizontal axis represents 15 minutes.
- **Absolute air pressure.** The absolute air pressure is the actual pressure in the location you are at that moment.
- **Time.** Displays the current time.

3.4.2. Use

With the Use function you can define whether the air pressure measurement is used to define the altitude or to represent the weather conditions. For more information, refer to page 32.

NOTE: *For most functions of the Weather mode the correct Use setting is Baro.*

To select either Altimeter use or Barometer use

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Use* with the arrow buttons and press *Suunto*. The alti/baro field is activated.
3. Change the content of the field with the arrow buttons and press *Suunto*. You return to the function menu.

3.4.3. Sealevel

With this function you can set the sea level barometric pressure. This is the value of barometric pressure at your current location reduced to sea level. Information on the current sea level pressure can be found newspapers, local news and radio weather reports, the local airport facility or in the Internet under local weather. For more information about the reference altitude, refer to page 33.

To set the sea level pressure

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Sealevel* with the arrow buttons and press *Suunto*.
3. With the arrow buttons, set the sea level pressure in the field to match the current sea level barometric pressure of your current location and press *Suunto*. You return to the function menu.


3.4.4. Alarm

When active, the weather alarm informs you if the air pressure drops more than 4 hPa/0,118 inHg in 3 hours.

NOTE: *The weather alarm is activated only when the Use function is set to Baro.*

To activate or deactivate the weather alarm

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Alarm* with the Arrow buttons. The current status of the alarm can be seen from the function menu.
3. Press *Suunto*. The on/off field is activated.
4. Change the field to either on or off with the arrow buttons and press *Suunto*.

When the weather alarm goes on, the alarm symbol  is flashing and the backlight switches on. To acknowledge the weather alarm, press any button.

3.4.5. Memory

The memory automatically stores weather-related information from the last 48 hours. When you scroll through the stored information, it is presented in the following order:

- Maximum sea level air pressure during the measuring period, date and time.
- Minimum sea level air pressure during the measuring period, date and time.
- Maximum temperature during the measuring period, date and time.
- Minimum temperature during the measuring period, date and time.
- Sea level air pressure and temperature in relation to the time and date starting from the current moment. The first 6 hours are displayed in 1-hour intervals, the next 42 hours in 3-hour intervals.

NOTE: *If the Use function has been set to Alti (altimeter), the barometric value stored in memory is always the same.*

To view the weather information stored in the memory

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Memory* with the arrow buttons and press *Suunto*. The first information page is displayed.
3. Scroll the information with the arrow buttons—the *up* arrow scrolls forward and the *down* arrow backward.
4. To stop viewing the memory content, press either *Suunto* or *Stop/CL* at any time.

3.5. HIKING MODE

3.5.1. Main Display

When you select the Hiking mode, the main display opens. The main display has three rows.

Ascent/descent rate

The first row displays the ascent/descent rate in the selected unit. For more information about defining the unit of rate, refer to page 30.

Altitude

The second row displays the altitude. For more information about defining the unit of altitude, refer to page 29.

Shortcuts

The third row of the main display contains shortcuts to three functions. To change the function, press the *Stop/CL* button.

- **Asc.** The cumulative ascent since the logbook was started. If the logbook is not running, the display shows text "ASC 0".
- **Differ.** When you select the Differ function, it displays the difference in altitude and time since the last reset of the function. To reset and start a new measurement, press *Start*. Differ is always in the measuring mode, i.e. it measures the time and altitude difference constantly but displays them only when you select the function.

Both hours and minutes are displayed during the first 10 hours. During the next 89 hours, only hours are displayed. Finally, the display shows only a dash and letter 'h'.

- **Time/Heart Rate.** Displays the current time. If the heart rate monitor is receiving a heart rate signal, this row displays the heart rate instead of time.

3.5.2. Logbook

The logbook gives you the possibility of saving information regarding, for example, a hiking trip. When you start the logbook, it starts gathering information about the cumulative ascents and descents, average ascent and descent rates, highest and lowest points, heart rate and specific marks you can set during the trip. Logbook information is updated in 10 second intervals. When you stop the logbook, the information gathered thus far is saved as a logbook file that can be viewed later. The maximum duration of one logbook is 168 hours = one week. After this, the logbook stops automatically. Suunto X6HR can store 20 logbook files at one time. More logbooks can be saved to your PC with the help of the PC Interface. For more information, see page 58.

Starting logbook

To start the logbook

1. Press *Suunto* in the main display.
2. In the function menu, scroll to *Logbook* with the arrow buttons and press *Suunto*.
3. Scroll to *Start* and press *Suunto*.

If the logbook is not running and there is enough memory left, recording begins. The message "LOGBOOK STARTED" is displayed and you return to the function menu.

If the logbook is already activated, the message "LOGBOOK ALREADY RUNNING" is displayed. You return to the function menu, in which the Stop field is displayed in reversed color.

If there is not enough memory left, the message "MEMORY FULL" is displayed and Suunto X6HR moves to a display that asks you to erase a logbook file. Suunto X6HR first suggests the oldest file.

Select the logbook file to be deleted with the arrow buttons and press *Suunto*. The file is deleted from the memory and you return to the logbook menu.

NOTE: Heart rate information is recorded only if the transmitter belt is active when the logbook is running.

Stopping logbook

To stop the logbook

1. Press *Suunto* in the main display.
2. In the function menu, scroll to *Logbook* with the arrow buttons and press *Suunto*.
3. Scroll to *Stop* and press *Suunto*. The saving stops and the message “LOGBOOK STOPPED” is displayed. You automatically return to the function menu.

If the logbook was not running when you tried to stop it, you return to the function menu.

Viewing logbook files

The logbook list includes the Hiking mode logs saved in the Suunto X6^{HR} memory. You can scroll the list forwards from the first item and either forwards or backwards from all the other items.

To view the log files

1. Press *Suunto* in the main display.
2. In the function menu, scroll to *Logbook* with the arrow buttons and press *Suunto*.
3. Scroll to *View* and press *Suunto*. A list of all the saved logbook files is displayed.
4. Scroll the list with the arrow buttons until the logbook file you want to view is active and press *Suunto*.
5. The first display of the logbook file is shown. Press the *up* arrow to move to the next display. The displays contain the following information
 - Starting date and time, total time of the file and the number of runs. An ascent and consecutive descent of at least 50 meters is considered a run.

- Total ascent and the average ascent rate.
- Total descent and the average descent rate.
- The highest point, date and time.
- The lowest point, date and time.
- Average heart rate.
- The minimum and maximum heart rates.
- The marks the user has added to the logbook file include the altitude, heart rate, date and time of the mark. The maximum amount of marks is 10.

To return to the main display, press *Suunto* or *Stop/CL* for more than 2 seconds.

NOTE: *If you try to view the list but there are no saved logbook files, the following message is displayed “NO LOGBOOK FILES” and you return to the logbook menu.*

NOTE: *If the heart rate monitor was not active during the logbook recording, the text “- -” is visible on the heart rate displays.*

Erasing logbook files

To erase a log file

1. Press *Suunto* in the main display.
2. In the function menu, scroll to *Logbook* with the arrow buttons and press *Suunto*.
3. Scroll to *Erase* with the arrow buttons and press *Suunto*.
4. A list of all the recorded logbook files is displayed. The oldest file is displayed in reversed color. Scroll the list with the arrow buttons until the logbook file you want to erase is active and press *Suunto*.
5. The Suunto X6HR displays the file and the text “ERASE?”
6. If you want to accept the deletion, press *Suunto*. You return to the list of logbook files.
7. If you want to cancel the deletion, press *Stop/CL*. You return to the logbook file list.

Viewing logbook history

The logbook history contains the cumulative values of ascents and descents and the highest point of all logbooks (Hiking and Chrono modes) recorded during the Suunto X6HR lifetime.

To view the history

1. Press *Suunto* in the main display.
2. In the function menu, enter *Logbook* by pressing *Suunto*.
3. Scroll to *History* and press *Suunto*.
4. Press the *up* arrow to scroll the history information. The information is displayed in the following order:
 - Cumulative ascent.
 - Cumulative descent.
 - The highest point, date and year.

Resetting the logbook history

To reset the logbook history:

1. Connect your Suunto X6HR to Suunto Activity Manager.
2. Click Wristop → History → Reset History. This will transfer the current history data to SAM database and set the history values in the Wristop computer memory to zero.

Logbook marks

You can add marks to the logbook file and save information on the altitude of a specific point and time. This can be done in Hiking mode only. The maximum number of marks in each file is 10.

Adding a mark to the logbook file also records the heart rate of the same specific time if the heart rate monitor is active.

To add a mark, press the *Start* button with a short press when the logbook is running. A long press activates the backlight and no logbook mark is made. The marks are added to the logbook file and they can be viewed through the file list (see page 43). When the mark has been added, the message "MARK POINT SAVED" is displayed.

When you have saved marks, the PC can create a profile that connects them with a line. With this feature you can, for example, create a simplified altitude profile of your trip. You can also use marks to compare the difference in time and altitude between two points of the trip. (Compare with the Differ function on page 41.)

3.5.3. Use

With the Use function you can define whether the air pressure measurement is used to set the altitude or to represent the weather conditions. For more information, refer to page 32.

To select either Altimeter use or Barometer use, follow these steps:

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Use* with the arrow buttons and press *Suunto*. The alti/baro field is activated.
3. Change the content of the field with the arrow buttons and press *Suunto*. You return to the function menu.

3.5.4. Altitude

With this function you can set the reference altitude. For more information about the reference altitude, refer to page 33.

To set the reference altitude, follow these steps:

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Altitude* with the arrow buttons and press *Suunto*.

3. With the arrow buttons, set the reference altitude in the field to match the altitude of you current location and press *Suunto*. You return to the function menu.

3.5.5. Alarms

The altitude alarm is intended to warn you if you pass the preset altitude limit. The ascent/descent alarm warns you if your ascent/descent rate is faster than the preset rate. When the alarm sounds, you can acknowledge it by pressing any button.

NOTE: *The alarms are functional only when the Use function is set to Alti.*

Setting the altitude alarm

To set the altitude alarm

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Alarms* with the arrow buttons and press *Suunto*. The alarm menu is displayed.
3. Scroll to *Altitude* and press *Suunto*. The on/off field of the next display is activated.
4. Change the status of the alarm to either on or off with the arrow buttons and press *Suunto*. The altitude field is activated.
5. Change the altitude to be alarmed with the arrow buttons and press *Suunto*. You return to the function menu.

Setting ascent/descent alarm

To set the ascent/descent alarm

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Alarms* with the arrow buttons and press *Suunto*. The alarm menu is displayed.
3. Scroll to *Asc/Dsc* and press *Suunto*. The on/off field of the next display is activated.

4. Change the status of the alarm to either on or off with the arrow buttons and press *Suunto*. The rate field is activated.
5. Change the asc/dsc rate to be alarmed with the arrow buttons and press *Suunto*. You return to the main display.

NOTE: *The ascent is indicated by positive values, the descent by negative values.*

3.6. CHRONO

3.6.1. Main Display

When you select the Chrono mode, the main display opens. The main display has three rows.

Altitude

The first row displays the altitude in the selected unit. For more information about defining the unit of altitude, refer to page 29.

Stopwatch

The second row displays the total time or split time. The *split time* means the time from the start of the timing to this moment. When you navigate to the main display, the time on the second row is either *0.00,0*, the time of the previous timing, or, if the stopwatch has already started, a running time. The time starts running when you press the *Start* button.

If you want to *record* a split and lap time, press *Start* again. The time on the middle row stops for 3 seconds to display the split time, displays the lap time for another 3 seconds and then starts running again.

When you want to *stop* the timing, press the *Stop/CL* button while in the Chrono mode. The stop time is then displayed on the second row. You can zero the display by long pressing the *Stop/CL* button.

NOTE: *If you want to continue the same timing after stopping it, press Start instead of zeroing the display.*

NOTE: *You must have free space in the memory to be able to start the timing. If the memory is full, the message “MEMORY FULL” is displayed and the Suunto X6HR suggests the oldest memory file to be erased. Erase the suggested file by pressing Suunto or select and erase another file. After the deletion, you can start the chrono. For more information about erasing memory files, refer to page 56.*

Time/Heart Rate

The third row displays the heart rate.

If the heart rate monitor is not active, the third row displays the current time. When you enter the Chrono mode, the third row displays the time. If, however, Suunto X6HR receives a heart rate signal, the third row automatically switches to showing heart rate. If the reception of the heart rate signal is discontinued, “—” appears on the third row. If the signal is not received within 5 minutes, the third row starts showing time again. To reactivate the heart rate display, switch to another mode and then return back to Chrono mode.

3.6.2. Use

With the Use function you can define whether the air pressure measurement is used to represent the altitude or the weather conditions. When the Chrono is on, it is advisable to activate the Alti use. For more information, refer to page 32.

To select either Altimeter use or Barometer use

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Use* with the arrow buttons and press *Suunto*. The alti/baro field is activated.
3. Change the content of the field with the arrow buttons and press *Suunto*. You return to the function menu.

3.6.3. Altitude

With this function you can set the reference altitude. For more information about the reference altitude, refer to page 33.

To set the reference altitude

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Altitude* with the arrow buttons and press *Suunto*.
3. With the arrow buttons, set the reference altitude in the field to match the altitude of you current location and press *Suunto*. You return to the function menu.

3.6.4. Timer

You can activate the timer to sound a signal after set periods. It can be used, for example, for interval training. Two different intervals, *Int1* and *Int2*, can be set. The timer is synchronized with the stopwatch, and if turned on, it signals when the stopwatch is running. If two intervals have been set, they will signal consecutively, interval 1 with one long beep and interval 2 with two shorter beeps.

NOTE: *You do not have to acknowledge the signal in any way when you hear it.*

Activating timer

To activate the timer

1. To access the function menu, press *Suunto* in the main display.

2. In the function menu, scroll to *Timer* with the arrow buttons and press *Suunto*. The *On/Off* selection is activated.
3. Set the timer *on* with the arrow buttons and press *Suunto*. A long press of the *Suunto* button brings you back to the main window if the interval is already correct. A short press activates the *Int1* minutes field.
4. Set the minutes with the arrow buttons and press *Suunto*. The seconds field is activated.
5. Set the seconds with the arrow buttons and press *Suunto*. The *Int2* minutes field is activated. If you leave the *Int2* field to show zero, the timer signals only the *Int1* interval.
6. Set the minutes with the arrow buttons and press *Suunto*. The seconds field is activated.
7. Set the seconds with the arrow buttons and press *Suunto*. The timer is now set.
8. The timer starts when you start the stopwatch with the *Start* button. You can also start the timer when stopwatch is running. Then the *Int1* starts from the moment when you set the timer status from *off* to *on* and confirm it by pressing *Suunto*.

Note: *If you change the intervals when the timer is active, the new interval times become effective after the ongoing interval has ended.*

Inactivating timer

To stop the timer without stopping the stopwatch


1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Timer* with the arrow buttons and press *Suunto*. The *Timer* menu is displayed, and if the timer is active, the *on* field is displayed in reversed color.
3. Change the setting to *off* with the arrow buttons and press *Suunto*. The timer is now inactivated and will not sound signals when the stopwatch is running.

3.6.5. HR Limits

The user can set limits to the heart rate monitor. When the heart rate is above the set *High* limit or below the set *Low* limit, Suunto X6^{HR} gives an alarm signal. The HR limits can be activated and deactivated with a long press of the *Suunto* button in any of the main mode windows. The Low limit signal is a beep on every third heart beat. The High limit signal is a series of four beeps in the rhythm of the heart rate, followed by a pause on the fifth heart beat.

Setting the Heart Rate limits

To set the heart rate limits

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *HR Limits* with the arrow buttons and press *Suunto*. The HR limits menu is displayed.
3. Set the *HR Limits* function *on* with the arrow buttons and press *Suunto*.
4. Set the *High* heart rate limit with the arrow buttons and press *Suunto*.
5. Set the *Low* heart rate limit with the arrow buttons and press *Suunto*. You return to the function menu and the heart rate limit has been set. The alarm symbol  is activated on the display.

NOTE: *The maximum High rate is 230 and the minimum Low rate is 30. The High rate cannot be set to lower than the Low rate and vice versa. If the High rate is scrolled above 230, it continues from the Low rate upwards.*

6. To set *HR limits on* or *off* during training, long press *Suunto* button in the main display of any of the modes. This changes the status of *HR Limits* from *on* to *off* and vice versa.

3.6.6. Memory

The Memory function of Suunto X6HR records time and altitude data always when the stopwatch is active. Heart rate data is recorded only when the transmitter belt is active. The same memory file contains both altitude and heart rate data, but the data is viewed separately with *View Alti* and *View HR*. You can view the data simultaneously with the PC software. If the transmitter belt was not active when the recording began, no heart rate data is viewable in the memory file.

Viewing Heart Rate memory

The memory file can be viewed in relation to heart rate data.

To view a memory file, follow these steps:

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Memory* with the arrow buttons and press *Suunto*. The memory menu is displayed with *View HR* in reversed color.
3. Press *Suunto*. The list of memory files is displayed. The files in the file list are organized so that the latest file is shown first.
4. Scroll to the file you want to view with the arrow buttons and press *Suunto*. If the file does not contain heart rate data, the message "NO HR DATA" is displayed and you return to the file list.
5. Scroll the information with the arrow buttons. The information is displayed in the following order:
 - The total duration of the file and the number of laps in the file.
 - Average heart rate.
 - Maximum and minimum heart rates.
 - Heart rate over the *High* limit. Shows the heart rate and time in minutes and seconds.

- Heart rate under the *Low* limit. Shows the heart rate and time in minutes and seconds.
- More specific information about the file, including the heart rates on individual points according to recording interval, and graphical presentations about the heart rate. These are displayed in the following way.

First row:

- Total elapsed time.

Second row:

- The left side displays a graphical presentation of heart rate in relation to time. The scale of the graphical presentation depends on the set recording interval.
- The right side displays the average heart rate from the start of the recording to the time shown on the first row. For recorded lap times, the right side displays texts “lap” and “split” and the corresponding lap and split time numbers.

Third row:

- Heart rate displayed with the set recording interval (2,10 or 60 seconds).

NOTE: *If heart rate has not been recorded, the value in the third row is 0.*

Viewing Altitude memory

The memory file can be viewed in relation to the time and altitude data.

To view a memory file

1. To access the function menu, press *Suunto* in the main display.
2. In the function menu, scroll to *Memory* with the arrow buttons and press *Suunto*.
The memory menu is displayed.
3. Scroll to *View Alti* in the memory menu and press *Suunto*. The file list is displayed.

4. Scroll to the file you want to view with the arrow buttons and press *Suunto*.
5. Scroll the information with the arrow *up* button. The information is displayed in the following order:
 - The total duration of the file and the number of laps in the file.
 - Total ascent and the average ascent rate.
 - Total descent and the average descent rate.
 - The highest point, date and time.
 - The lowest point, date and time.
 - More specific information on the file, including altitude and ascent and descent rates on individual points according to recording interval, and graphical presentations of the altitude. These are displayed in the following way:

First row:

 - Total elapsed time.

Second row:

 - The left side displays a graphical presentation of the altitude in relation to time. The scale of the graphical presentation depends on the set recording interval and the recorded altitude differences.
 - The right side displays ascent and descent rates in the point of time displayed in the first row. For recorded lap times, the right side displays the texts “lap” and “split” and the corresponding lap and split time numbers.

Third row:

 - Altitude displayed with the set recording interval (2, 10 or 60 seconds).

NOTE: *If you try to view a file when the file list is empty, the message “NO FILES IN MEMORY” is displayed and you return to the function menu.*

NOTE: When you start the Chrono, it starts recording the altitude profile. If the memory becomes full while the recording is on, Suunto X6HR stops recording the profile. However, the stopwatch remains running and the summary values are updated.

Erasing memory files

If the memory is full, you cannot start the timing until you have deleted at least one memory file.

To delete a memory file

1. To access the function menu, press *Suunto* in the Chrono mode's main display.
2. In the function menu, scroll to *Memory* with the arrow buttons and press *Suunto*. The memory menu is displayed.
3. Scroll to *Erase* and press *Suunto*. The list of memory files is displayed. The files in the file list are organized so that the latest file is shown first.
4. Scroll to the file you want to erase with the arrow buttons and press *Suunto*.
5. Scroll to *Erase* and press *Suunto* to erase the file. You return to the function menu.

NOTE: If you try to erase a file when the file list is empty, the message "NO FILES IN MEMORY" is displayed and you return to the function menu.

To quit *Erase* at any point, press *Stop/CL* to return to the function menu.

Setting the recording interval

The recording interval defines how often the information is saved to the memory when the timing is running. The recording interval is either 2, 10 or 60 seconds. If you change the interval while the stopwatch is running, the change does not affect the current recording. The change applies to the next stopwatch recording.

To set the interval

1. To access the function menu, press *Suunto* in the Chrono mode's main display.
2. In the function menu, scroll to *Memory* with the arrow buttons and press *Suunto*.
The memory menu is displayed.
3. Scroll to *Interval* and press *Suunto*.
4. Select the interval with the arrow buttons and press *Suunto*.

The memory capacity is 4h 20 min with 2 s recording interval, 22 h with 10 s interval and 133 h with 60 s interval. These values are approximate, depending on how many lap times you record in the memory. When you select the recording interval, the exact free memory capacity is displayed on the bottom row of the Interval menu of the Memory function.

4. ADDITIONAL FEATURES

4.1. PC INTERFACE

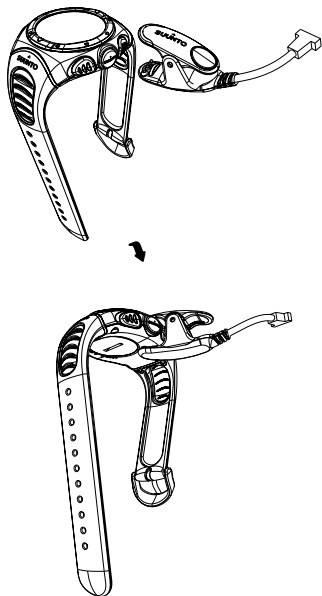
With the help of the PC Interface you can transfer and store the logs you have recorded with your Suunto X6HR to your PC. The logs can be either Hiking logs stored in the Suunto X6HR log-book files, weather logs stored in the weather memory or Chrono logs stored in the chrono memory. When the data has been transferred, you can organize, view and add related information to it with the Suunto Activity Manager software.

The PC Interface cable and Suunto Activity Manager are delivered in the same package with your Suunto X6HR. The installation instructions for the software can be found on the cover of the Suunto Activity Manager CD-ROM.

The latest update of Suunto Activity Manager is always downloadable in www.suunto.com.

4.1.1. Transferring Data

Attach the cable to the serial port of your PC. Make sure that the port is not used by other programs. You can also use a USB port with a serial/USB adapter.



Open Suunto Activity Manager (SAM) and connect the cable to your Suunto X6HR. Suunto X6HR goes automatically into data transfer mode. This is indicated by the text “SERIAL TRANSFER” on the Suunto X6HR display. Click on the “Wristop” icon in the upper left corner of SAM to open the data transfer window. Press the “Connect” button in the lower part of the window to transfer the list of log files from the wristop computer to the SAM window. When you drag and drop the logs into appropriate folders, they are saved to the hard disk of your PC. The folders are located on the left side of the SAM data transfer window. When you have uploaded the logs, you can delete them from the Suunto X6HR memory by dragging them to the Recycle bin in the lower left corner of Suunto Activity Manager to create more space for new logs.

For more detailed information, refer to the Suunto Activity Manager Help. The Help is accessed by clicking the help icon on the upper right corner of the display. You can also refer to the SAM Tutorial for step-by-step instructions. The tutorial is accessed by clicking on the Tutorial link in the Help Contents window in the SAM Help.

4.1.2. Suunto Activity Manager Features

Users

You can create a user profile and add information about yourself and your Suunto X6HR. Creating user information is useful if you have several wristop computers you want to use with the same PC, or when many users use the same wristop computer.

Logs

When you have uploaded the logs from the Suunto X6HR, you can organize them with Suunto Activity Manager. You can, for example, create folders in which you can store the logs—the hiking logs can be arranged in a different folder than the skiing logs. You can also sort the logs, move them between folders and delete them or search the log information. It is even possible to upload them to the SuuntoSports.com site.

Charts and Data

You can examine the log information by creating charts from it. The charts show the altitude profile and/or heart rate. Open the folders and select the logs you want to see. Click on the “Open Log” button to view the file as a chart. If you have opened several logs, they are listed in the window below the chart. There you can select which profiles you want to view simultaneously. You can also add bookmarks to a chart. The bookmark can be either a text or an image—for example a photograph of the highest peak of your trek.

If you wish, you can also view the log information as a data list where the altitude and heart rate values are listed in chronological order. To view the data list, click on the “Data” button on the upper part of the chart window. Both the charts and the list can be printed.

NOTE: *You can correct the error values of Heart rate on the Data page by writing the correct value into the Heart rate field.*

Analyzing Data

You can analyze the data in the logs according to your activities and different time periods. Select the files you want to analyze from the folder and click on “Open Logs”. Then press “Analyze”. The analysis displays information on altitude zones, duration and heart rate zones. The analysis results are displayed as 3-D bar diagrams that you can rotate on the screen.

Changing Suunto X6^{HR} Settings

If you wish, you can change some Suunto X6^{HR} settings with the Wristop Computer section of Suunto Activity Manager. You can make changes to the following settings:

- Asc/Dsc—select the used ascent/descent unit (m/s, m/min, ft/s, ft/min).

- Altitude—change the used altitude unit (m or ft).
- Pressure —select the used pressure unit (hPa or inHg).
- Temperature —select the used temperature unit (°F or °C).
- Slope—select the used slope unit (% or ‰).
- Time —select between 12- or 24-hour display.
- Date —select the date format (day/month, month/day, day).
- Light—select the light setting (Normal, NightUse, Off).
- Tones—set the buttons on or off.
- Icons—set the mode icons on or off.

The current settings are shown in yellow. To change them, click the desired settings with mouse and then click “Update settings” in the lower right corner of SAM when your Suunto X6_{HR} is connected to PC.

4.2. SUUNTOSPORTS.COM

SuuntoSports.com is an international free web community where you can refine and share the data that you have recorded with your personal Suunto instrument and analyzed with the sport specific PC interface. SuuntoSports.com offers you a number of features that help you to get more out of your sport and your Suunto X6_{HR}.

If you already own a personal Suunto sports instrument you can access all sport-specific functions through registration. If you do not yet have an instrument you may either log on as a guest or register yourself. As a guest you can view and read, but registration gives you the right to use other functions and participate in discussions.

4.2.1. System Requirements

SuuntoSports.com has the following system requirements:

- Internet Connection
- Browser: IE 4.0 or newer, Netscape 4.7x or newer
- Resolution: minimum 800 x 600, best viewed with 1024 x 768

4.2.2. SuuntoSports.com Sections

SuuntoSports.com includes three sections with several functions. The following paragraphs describe only the basic functions of SuuntoSports.com. You can find detailed descriptions of all the site functions and activities and step-by-step instructions for using them from the site Help. The Help is available on each page and its icon is located on the right side of the bar dividing the screen. The Help is frequently updated as the site develops.

SuuntoSports.com offers several possibilities for searching the information on the site. In addition to the free search, you can search, for example, for groups, users, locations, logs and sports.

The information published on the SuuntoSports.com contains internal links so that you do not always have to search for the information from the very beginning. For example, if you view a description of a location, you can follow the links and view the location information, the sender's personal information, the logs related to the location and the charts created from the logs, if the sender has agreed to this information being made public.

My Suunto

The My Suunto section of the site is meant for your personal information. You can store information about yourself, your wristop computer, your sports and training

activities, etc. When you upload your personal logs to SuuntoSports.com with the Suunto Activity Manager, they are displayed in your personal information and no other user can see them. Here you can also manage them and decide if they are presented to all other community users or to limited groups or if they are kept for your personal use only.

When you have uploaded logs to SuuntoSports.com, you can create charts from the altitude and heart rate data in the logs and attach them to your training locations and activities. You can also publish your logs and compare them with other users' logs. You can also publish travel reports, which include text, images and log files.

Communities

In the Communities section, you can form or search groups and manage your own groups. For example, you can create a group for all your sports friends, and share information about each other's results, give advice and discuss, where and when you could go training together. Groups can be either open or closed. Closed groups mean that you have to apply for a membership and be accepted before you can participate in group activities.

All groups have a home page that displays information about group events and includes news, notice board and other information. Group members can also use group-specific bulletin boards, chat rooms and group calendars, and add links and create group activities.

Sport Forums

SuuntoSports.com has its own Sport Forum with pages for each Suunto sport. The basic features and functions are the same for all sports pages—sport specific news, bulletin boards and discussions. Users can also suggest links to sports-

related sites and tips regarding the sport and equipment to be published on the site, or publish their own travel reports.

Sport forums include presentations of locations that are related to the sport. Users can rank the locations with comments and the results are published next to the location information. A ranking list can also be created for other things—for example, which group has most members, who has uploaded most logs or collected the biggest verticals, visited the highest places, and so on.

4.2.3. Getting Started

To join the SuuntoSports.com community, connect to the Internet, open your web browser and go to www.suuntosports.com. When the opening page appears, click the *Register* icon and register yourself and your Suunto sports instrument. You can change and update your personal and equipment profiles later in My Suunto section.

After the registration, you will receive your password by e-mail. Using this password you can enter the SuuntoSports.com home page that introduces the site structure and functional principles. You can later change the password in the My Suunto section.

NOTE: *SuuntoSports.com is continuously developed further and its content is subject to change.*

5. TECHNICAL DATA

Suunto X6HR

- Operating temperature -20 °C to +50 °C/-5°F to 120°F
- Storage temperature -30 °C to +60 °C/-22°F to 140°F
- Weight 54 g
- Water resistant 100 m/330 ft
- Mineral crystal glass
- User replaceable battery CR2032
- PC interface with serial connector
- Extension strap (accessory)

Altimeter

- Display range -500 m to 9000 m / -1600 ft to 29500 ft
- Resolution 1 m / 3 ft

Barometer

- Display range 300 to 1100 hPa / 8.90 to 32.40 inHg
- Resolution 1 hPa / 0.05 inHg

Thermometer

- Display range -20°C to 60°C / -5°F to 140°F
- Resolution 1°C / 1°F

Compass

- Resolution 1°

Clinometer

- Display range 0° to 60°, 0% to 173%
- Resolution 1°, relative accuracy 10%

Transmitter Belt

- Weight 59g
- User replaceable battery CR2032
- Water resistant 20 m/66ft
- Modulation frequency ca. 5 kHz

6. COPYRIGHT AND TRADEMARK NOTICE

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8. LIMITS OF LIABILITY AND ISO 9001 COMPLIANCE

If this product should fail due to defects in materials or workmanship, Suunto Oy will, at its sole option, repair or replace it with new or rebuilt parts, free of charge, for two (2) year from the date of its purchase. This warranty is extended only to the original purchaser and only covers failures due to defects in materials and workmanship that occur during normal use while in the period of the warranty.

It does not cover battery replacement, damage or failures resulting in accident, misuse, neglect, mishandling, alteration or modifications of the product, or any failure caused by operation of the product outside the scope of its published specifications, or any causes not covered by this warranty.

There are no express warranties except as listed above.

The client can exercise the right to repair under the warranty by contacting our Customer Service department to obtain a repair authorization.

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www.suunto.com

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